

ATTACHMENT B

Amendments to the Specification

Please replace the heading at page 1, line 2 with the following new heading:

BACKGROUND OF THE INVENTION

Please replace the paragraph at page 1, line 3 through page 2, line 3 with the following amended paragraph:

The invention relates to constructive improvements in ~~the~~ a film folding and supplying unit for the machines described in the Italian patent n. 1 266 296, property of the same applicant, to which is made wide reference. In this type of machines, the packaging film has a width which is suitable ~~to~~ for the packaging of products which have variable dimensions inside a large range and its width is proportionate to that of the products having the greatest dimension that the machine can wrap. The width of the film is adapted to the dimensions of the product to be wrapped, with a process of pleating of the same film during the feeding phase to the wrapping phase, so that the longitudinal axis of the pleats ~~results to be~~ which are oriented in the length direction of the portion of film inserted in said station and such that ~~the~~ in the packaging of products having small dimensions, it is in any case provided for the formation of a wrapping which is enough wrapped and blocked. In this type of machines, the film is unwound from the feeding bobbin, passes ~~through~~ through the tightening pulley which provides a longitudinal tensioned feeding and then is transmitted on a transversal and arched roller which transversally tensions the same and avoid the formation of uncontrolled pleats because the film is coming out from said roller with an ascending direction and runs longitudinally with ~~an~~ its own center portion, on a rectilinear guide anteriorly provided with an idle roller which facilitates the entry of the film, the lateral edges of which are folded under

said guide by means of respective lateral guides, the whole in such a manner that the film ~~results~~ is folded with a pressed omega transversal shape, and presents in such manner a width which is proportionate to the width of the product to be wound. Said curved transmission roller has been resulted of difficult ~~realisation~~ realization so that it has been thought to substitute the same with a composite roller formed by a central roller and two long lateral rollers, having the same distance from the central roller with an angle of about 170° . Another drawback found in the apparatus of the known type, is due to the great contact surface of the film with the folding guides above mentioned which were ~~realised~~ realized with polished metal or with material having a low friction coefficient. To improve the folding action performed by the guides, the same have been provided on the edges which was before operating in contact with the film, with rows of idle wheels with which the film is co-operating with rolling friction.

Please replace the paragraph at page 2, lines 4 through 21 with the following amended paragraph:

The lateral edges of the film which is coming out from said folding which are external to the folded portion of the said film, run upon rubber and idle rollers upon which the same are maintained in contact by a contrast superior roller, idle, but made of metal and sprung, after that the folded film arrives to a gripper-shaped distributor, made by a lower fixed portion, to which there is fixed in projecting manner said longitudinal and central guide, and by an upper portion assembled upon a structure which may oscillates upon an anterior axis which is parallel to the same distributor, and which is carrying the final folder of the machine, the one which is folding on the bottom of the product the last portion of film previously retained by the same distributor, and which is carrying the heated conveyor for the welding of the lower edges of the packaging. This

structure may be raised with oscillation upon said transversal axis, in the initial phase in which the film coming from a new bobbin must be inserted in a machine. Upon this structure there is assembled said metallic and sprung roller which co-operates with said ~~rubberised~~ rubberized rollers. The distributor of the film ~~realised~~ realized with the known technique, is complex and scarcely reliable, ~~so that a further.~~ An object of the invention is to improve the distributor and to provide freewheel means in the upper metallic roller contrasting the ~~rubberised~~ rubberized rollers, in such a manner that the film which passes through said rollers may only go forward and not backward.

Please replace the paragraph at page 2, line 22 through page 3, line 13 with the following amended paragraph, including the new heading below:

In the apparatus of the described type, both folding guides of the lateral edges of the film fed by the machine, and the ~~rubberised~~ rubberized rollers, are pre-arranged to be automatically adjustable in the reciprocal distance by means of ~~self-centring~~ self-centering regulation mechanism, controlled by an electric step motor controlled by the computer of the machine which by means of the optical barriers detects the dimensions of the products to be packaged, to automatically adjust to these the width of the packaging film.

SUMMARY OF THE INVENTION

~~It has been find out that it is possible to realise~~ The present invention is directed to a packaging machines which is more economic and is able to give the same quality of packaging ~~of the above~~ as the prior mentioned machines, using ~~rubberised~~ rubberized contrast rollers having a sufficient length and with static positioning and pre-arranging the guides for the folding of the edges of the film fed by the machine, with a manual regulation of the reciprocal distance. The products that the packaging

machine may process are dimensionally divided in two groups, ~~the~~ a group of the medium-small products and ~~the~~ a group of the large products and for each group of products, ~~there are used~~ film bobbins of different width are used, naturally more wide for the group of wide products, so if the machine had to pass from the operation of a group of products to another group of products, the bobbin of the film is changed and the pleating means of the same film are adjusted in a suitable manner. When the machine is pre-arranged for the processing of a group of products, the width of the folded film is chosen with regard to the width of the products having the smaller dimensions of that group and the width of the pleated film may be adjusted or remain constant, both for working of the small products and for the large ones of the same group.

Please insert the following new heading at page 3, between lines 13 and 14:

BRIEF DESCRIPTION OF THE DRAWINGS

Please insert the following new heading at page 4, before line 1:

DETAILED DESCRIPTION

Please replace the paragraph at page 4, lines 1 through 24 with the following amended paragraph:

~~It must be stated that the~~ The terms "front" and "rear" ~~are here considered~~ used within this disclosure with reference to the running direction of the film, ~~therefore.~~ Therefore, it will be defined as the term "front" is that portion which for the first is interested from the same film in its advancement the film first encounters as it advances. In Figures 1 and 2, ~~with numeral reference 1 is indicated~~ indicates the horizontal traverse member fixed with its ends to the sides of the frame of the machine, transversally transverse to the path of the film F and which is carrying the lower jaw of the distributor of the same film, ~~as mentioned after~~ will be discussed in further detail

below. In the centre line of the front of the traverse member 1, there is projecting fixed, by means of screws 2, the enlarged end 203 of the longitudinal member 103 of a ribbed structure 3 which has in plant a cross shape which is longitudinally downwardly inclined, upon said end 203 being rotatably assembled the intermediate portion of a shaft 104 which is parallel to the traverse member 1 and on the ends of which there are keyed the rubberized and equal rollers 4, 4', which support the lateral edges of the film which is coming out from the folding means further mentioned. The rollers 4, 4' have a length which is superior to these provided in the known art and their reciprocal distance remains the same upon variations of the products to be packaged. The most lower end of the longitudinal member 103 of the structure 3 ends with a fork conformation 303, which in its interior supports projecting and rotatably a roller 5 and which with its sides, which are diverging and inclined of about 8°-10° supports rotatably longer and equal rollers 105, 105', that with the roller 5 make a convex transmission which substitutes the arcuate roller in the prior art, upon which is transmitted the film unwound from the bobbin and coming from the tensioning pulley, to be transversally stretched, to be maintained-centred centered on the following folding means and to be pre-arranged in the best manner for the co-operation with said means.

Please replace the paragraph at page 7, line 3 through page 8, line 16 with the following amended paragraph:

From Figures 1, 2 and 5 it is noted that the traverse member 1 is placed with its upper wall at a level which is slightly superior to that of the film which is passing between the rollers 19, 4, 4', has the rounded edges and the same traverse 1 is anteriorly and superiorly open with a recess 26 which has substantially the same length of the distance which passes between the external sides of the rollers 4, 4' and in which

there is fixed with the screws 27, a jaw 28 having the shape of a small square member, the upper wall 128 of which is co-planar to the one of the traverse member 1 and is comb-shape, with the teeth oriented and opened in the travel direction of the film.

Upstream of the comb 128, the upper portion of the traverse member 1 carries a recess which is parallel to the same comb, in which there is housed, not projecting a ~~rubberised~~ rubberized grooved insert 29 which is blocked in situ for example by means of end screws 30. Outside of the unit 28, 29, at a short distance from its ends, on the traverse member 1 are superiorly provided recesses which house electromagnets 31, 31' (see also Figure 3). Over of the traverse member 1, at a short distance and ~~parallelly~~ parallel to this one there is arranged with its flat and toothed portion which forms a comb 132 complementary to the lower comb 128, a jaw 32 L-shaped to resist to the bending-torsion stresses, which is upwardly raised with its anterior ribbed portion, which is provided at least on the ends with transversal ribs 232, 232', and which is carrying laterally pins 33, 33', which are parallel to their longitudinal axis and corresponding with the point of the teeth of the comb 132, which with the same jaw which is referred to is fulcrumed at corresponding supports 34, 34', fixed to the sides of the structure 20. The jaw 32 carries at its end, onward extension appendices 332, 332', pre-arranged in such a manner that on the same may operate the end of springs for downwardly urging, which maintain said appendices attested against lower and adjustable retainers 36, 36' fixed to the near sides of the structure 20, in such a manner that the upper comb 132 results opportunely spaced from the lower comb 128 and that the film may freely ~~runs~~ run through the so made distributor. On the lower wall of the swinging jaw 32, upstream of the comb 132, there is fixed in relief a strip 37 of rubber and with longitudinal lines.

When the distributor is opened as from Figure 2, the strip 37 is raised and opportunely spaced from the lower one indicated with reference numeral 29, and from the ferromagnetic disks 38, 38' fixed to the inferior side of the same jaw 32 and ~~centred~~ centered with electromagnets 31, 31', are opportunely spaced from this latter components de-energized. When, on the contrary, the electromagnets 31, 31' are energized, as from Figure 3, these attract the above mentioned disks 38, 38' and cause downwardly oscillation of the portion of the upper jaw 32 which is provided of the rubber strip ~~38~~ 37, which blocks the film on the lower rubber strip 29, in contrast with the action of springs 35, 35', which are proportionally compressed, in such a manner to re-open, at the right time, the distributor as the energization of the said electromagnets 31, 31' ceases. Suitable means may be provided for the partializing of the energization of the electromagnets, 31, 31', in order to allow that the film results to be always transversally seized with pliers in the distributor, but in a position in which it can suitably run in longitudinal direction. This condition may be, for example especially useful in the phase in which the packaging film is transversally pre-stretched by some of the lateral grippers of the packaging machine.